

**AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT**1. CONTRACT ID CODE  
12PAGE OF PAGES  
1 22. AMENDMENT/MODIFICATION NO.  
6523. EFFECTIVE DATE  
JAN 17, 20034. REQUISITION/PURCHASE REQ. NO.  
See Page 2

5. PROJECT NO. (If applicable)

6. ISSUED BY CODE

PS42

7. ADMINISTERED BY (If other than Item 6) CODE

PS42G

Procurement Office  
George C. Marshall Space Flight Center  
National Aeronautics and Space Administration  
Marshall Space Flight Center, AL 35812

Gary Bugbee (256) 544-0270

8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State, and Zip Code)

Lockheed Martin Corporation  
P.O. Box 29304  
New Orleans, LA 70189

(x)

9A. AMENDMENT OF SOLICITATION NO.

9B. DATED (SEE ITEM 11)

X

10A. MODIFICATION OF CONTRACT/ORDER NO.

NAS8-36200

10B. DATED (SEE ITEM 13)

11/2/84

CODE 01539

FACILITY CODE

**11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS**

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended, ☐ is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:

(a) By completing Items 8 and 15, and returning \_\_\_\_\_ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

See Page 2

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

(x) A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.

EXECUTED COPY  
FMO (FOR OFFICIAL)

X B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).

C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:

D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor ☒ is not, ☐ is required to sign this document and return 3 copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

	<u>Contract Amount</u>	<u>Allotted Funding</u>
Previous Contract Amount	\$3,773,612,264	\$3,453,959,835
Decrease this Modification	-0-	300,000
New Contract Amount	\$3,773,612,264	\$3,454,259,835

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)

16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)

Gary D. Bugbee  
Contracting Officer

15B. CONTRACTOR/OFFEROR

15C. DATE SIGNED

16B. UNITED STATES OF AMERICA

16C. DATE SIGNED

(Signature of person authorized to sign)

BY Gary D. Bugbee  
(Signature of Contracting Officer)

1/17/03

- I. Pursuant to the provisions of Clause B.3 Contract Funding, this modification increases the contract funding as set forth.
- II. Clause B.3—Contract Funding, Paragraphs (a), is hereby amended to increase the total amount allotted to this contract by the amount of \$300,000. The total sum allotted for cost is hereby increased by \$300,000 and changed from \$2,965,826,019 to \$2,966,126,019. The estimated funded period of performance is unchanged.
- III. The modification administratively changes funding as set forth below:

Financial and Accounting Data

SAP PR # 4200002561:

WBS Element:	62-376-10-10
Internal Order:	FC400000
Cost Center:	62MP31
Fund Center:	62-376-10
Fund:	HS542003D
Amount:	\$300,000

- V. The following page of the contract is revised as appended hereto and made an inseparable part thereof.

Revised Page –  
B-4

- V. This modification consists in its entirety of Standard Form 30, Page 2 and the revised page listed in Paragraph IV. above.

**B.3 CONTRACT FUNDING (18-52.232-81) (JUN 1990)**

(a) For purposes of payment of cost, exclusive of fee, in accordance with the Limitation of Funds clause, the total amount allotted by the Government to this contract is \$2,966,126,019. This allotment is for all effort and covers the following estimated period of performance: September 30, 2002.

(b) An additional amount of \$488,133,816 is obligated under this contract for payment of fee.

(End of clause)

**B.4 FIXED FEE, AWARD FEE AND INCENTIVE FEE**

(a) The total fixed fee of \$3,898,366 shall be payable upon execution of this contract. The balance of the fixed fee identified in Part I is payable as determined in accordance with the provisions of FAR Clause 52.216-8 as contained in Section I of the Contract. The contract fixed fee included in Part III shall be payable upon execution of contract modification 257.

(b) The award fee which is determined to be payable by the Fee Determination Officer (FDO) shall be payable upon notice of award to the contractor, receipt of contract modification and the submission of a fee voucher, subject to the withholding provisions of the clause hereof entitled - AWARD FEE (18-52.216-7007).

(c) Provisional payment of award fee may be made monthly based upon the percentable of completion of work as determined by the Contracting Officer, subject to the following limitation:

(1) Provisional payment of award fee will not exceed 80 percent of the amount available for the period. The contractor's fee vouchers must contain separate calculations supporting the billing for provisional award fee.

(2) However, whenever in the opinion of the Contracting Officer, the contractor's performance in the Evaluation Criteria indicates that the award fee to be earned, as later determined by the FDO, may be less than the provisional payment rate, the provisional payments will be based on such lesser fee as the Contracting Officer may unilaterally determine to be appropriate.

(3) Any award fee that is awarded by the FDO shall be payable as an adjustment, upward or downward, of the provisional payments to an amount equal to the fee awarded. In the event provisional award fee payments exceed the award fee amount earned for an evaluation period, the contractor will be prohibited from billing for provisional fee during the subsequent period(s) until the overpayment has been recouped. In the event such overpayment is (continued on B-5).

DP

OMB Approval #: 2700-0042.

<b>AWARD/CONTRACT</b>		1. THIS CONTRACT IS A RATED ORDER UNDER OPAS (15 CFR 250)		RATING DO-A2		PAGE OF PAGES 1 163	
2. CONTRACT (Proc. Inst. (Form) NO.) NAS8-36200		3. EFFECTIVE DATE 11-2-84		4. ACQUISITION/PURCHASE REQUEST/PROJECT NO. H-5-SA-98572, H-6-SA-98572, H-8-SA-98572			
5. ISSUED BY Procurement Office George C. Marshall Space Flight Center National Aeronautics and Space Administration Marshall Space Flight Center, AL 35812		CODE AP43		6. ADMINISTERED BY (If other than item 5) AP43J/TNNEELEY/205-544-0401			
7. NAME AND ADDRESS OF CONTRACTOR (Inc., street, city, county, State and ZIP Code) Martin Marietta Corporation P.O. Box 29304 New Orleans, LA 70189				8. DELIVERY <input checked="" type="checkbox"/> FOB ORIGIN <input type="checkbox"/> OTHER (See below)			
				9. DISCOUNT FOR PROMPT PAYMENT 0%			
CODE 01539				FACILITY CODE			
11. SHIP TO/MARK FOR SEE ARTICLE NUMBER F-3				12. PAYMENT WILL BE MADE BY Financial Management Office George C. Marshall Space Flight Center, NASA Marshall Space Flight Center, AL 35812			
13. AUTHORITY FOR USING OTHER THAN FULL AND OPEN COMPETITION <input checked="" type="checkbox"/> 10 U.S.C. 2304(c)(1) <input type="checkbox"/> 41 U.S.C. 253(c)(1)				14. ACCOUNTING AND APPROPRIATION DATA 568-15-12-M900-SA-5-00H-000-2511 \$19.3M 568-15-12-M900-SA-6-00H-000-2511 \$24.8M 568-15-12-M900-SA-8-00H-000-2511 \$94.9M			
15A. ITEM NO.		15B. SUPPLIES/SERVICES		15C. QUANTITY		15D. UNIT PRICE	
SEE ARTICLE NUMBER B-1							
16. CONTRACT TYPE: CPAF							
17. TOTAL AMOUNT OF CONTRACT \$499,998,366							
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CONTRACTING OFFICER WILL COMPLETE ITEM 17 OR 18 AS APPLICABLE							
17. <input checked="" type="checkbox"/> CONTRACTOR'S NEGOTIATED AGREEMENT (Contractor is required to sign this document and return 3 copies to issuing office.)				18. <input type="checkbox"/> AWARD (Contractor is not required to sign this document.) Your offer on Solicitation Number _____ including the additions or changes made by you which additions or changes are set forth in full above, is hereby accepted as to the items listed above and on any continuation sheets. This award consummates the contract which consists of the following documents: (a) the Government's solicitation and your offer, and (b) this award/contract. No further contractual document is necessary.			
19A. NAME AND TITLE OF SIGNER (Type of Print) R. M. Davis President Manned Space Systems				20A. NAME OF CONTRACTING OFFICER Procurement Officer			
19B. NAME OF CONTRACTOR BY <u>R. M. Davis</u> (Signature of person authorized to sign)				20B. UNITED STATES OF AMERICA BY <u>Charles E. Hinkle</u> (Signature of Contracting Officer)			
19C. DATE SIGNED 6/7/88				20C. DATE SIGNED 6/7/88			

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SECTION B

SUPPLIES OR SERVICES AND PRICES/COSTS

B.1 SUPPLIES AND/OR SERVICES TO BE FURNISHED (18-52.210-72) (DEC 1988)

The Contractor shall provide all resources (except as may be expressly stated in this contract as furnished by the Government) necessary to furnish the items below in accordance with the Description/Specifications/Work Statement in Sections A through J, inclusive:

Fifth Production Buy - External Tank PreProduction Program - External Tanks ET-61 through ET-120 and Production of External Tanks ET-61 through ET-121.

(End of Clause)

B.2 ESTIMATED COST AND CONTRACT FEES

Part I -Fixed Fee Portion

(1) For the period November 2, 1984, through December 31, 1987, the Estimated Cost, Fixed Fee and Contract Value for the work defined as Long-Lead Effort in Attachment J-1, Paragraph 2.1.1, are as follows:

<u>Estimated Cost</u>	<u>Fixed Fee</u>	<u>Contract Value</u>
\$45,863,129	\$3,898,366	\$49,761,495

(2) For the period April 25, 1991, through December 20, 1991, the Estimated Cost, Fixed Fee, and Contract Value for ASRM Scope of Work, as identified in Attachment J-16 is as follows:

<u>Estimated Cost</u>	<u>Fixed Fee</u>	<u>Contract Value</u>
\$ 1,463,366	\$ 116,275	\$1,579,641

(3) The above Estimated Cost and Contract Value includes \$44,100,000 for the Exhibit "O" Long Lead procurement effort in Contract NAS8-33708 which was transferred to this contract.

Part II – Award Fee Portion

For the period January 1, 1988, through December 31, 1992, the Estimated Cost, Earned Award Fee, and Contract Value are as follows:

<u>Estimated Cost</u>	<u>Fixed Fee</u>	<u>Earned Award Fee</u>	<u>Contract Value</u>
\$843,640,485	\$315,498	\$114,691,806	\$958,647,789



Part III - Incentive Fee, Fixed Fee and Award Fee Portion

For the period January 1, 1993 through September 30, 2002 or as defined in Section J, Attachment J-5 of this contract, the Target Cost, Target Fee, Fixed Fee (January 1, 1993 through September 30, 1993), Earned Award Fee (October 1, 1993 through September 30, 2002), Performance Incentive Fee and Contract Value are as follows:

	<u>Target Cost</u>	<u>Target Fee</u>	<u>Earned Award Fee</u>
Previous	\$2,417,047,214	\$127,738,035	\$ 91,433,521
This Mod.	<u>-0-</u>	<u>-0-</u>	<u>780,540</u>
Total	\$2,417,047,214	\$127,738,035	\$ 92,214,061

  

	<u>Fixed Fee</u>	<u>Performance Incentive Fee</u>	<u>Contract Value</u>
Previous	\$8,007,036	\$3,906,696	\$2,648,132,502
This Mod.	<u>-0-</u>	<u>-0-</u>	<u>780,540</u>
Total	\$8,007,036	\$3,906,696	\$2,648,913,042

Part IV - Incentive Fee – Super Lightweight External Tank Non-Recurring Effort

For the period February 18, 1994, through June 30, 1998, the Target Cost, Target Fee, Technical Performance Incentive Fee, Special Technical Performance Incentive Fee and Contract Value for the Super Lightweight External Tank Non-recurring Effort as identified in Attachment J-17 of this contract is as follows:

	<u>Target Cost</u>	<u>Target Fee</u>	<u>Technical Performance Incentive</u>
Previous	\$93,616,615	\$1,460,419	\$7,302,096
This Mod.	<u>-0-</u>	<u>-0-</u>	<u>-0-</u>
Total	\$93,616,615	\$1,460,419	\$7,302,096

  

	<u>Special Technical Performance Incentive Fee</u>	<u>Contract Value</u>
Previous	\$3,000,000	\$105,379,130
This Mod.	<u>-0-</u>	<u>-0-</u>
Total	\$3,000,000	\$105,379,130

PART V – LONG LEAD BUY 6 MATERIAL/HARDWARE

Transferred to Contract NAS8-00016 by Mod 577

Part VI - Contract Summary

The Total Estimated/Target Cost, Transition Estimated Cost, Total Target Fee, Total Performance Incentive Fee, Total Fixed Fee, Total Earned Award Fee, Total Energy Cost Reduction Project Share, Small/Small Disadvantaged Incentive, Total KOR Share for Value Engineering, Total Earned Energy Savings Award Fee, Total Technical Performance Incentive Fee, Total Special Technical Performance Incentive Fee, Total Contract Value, and Potential Award Fee are as follows:

	<u>Total Estimated/ Target Cost</u>	<u>Transition Estimated Cost</u>	<u>Total Target Fee</u>
Previous	\$3,401,630,809	\$441,122	\$ 129,198,454
This Mod.	-0-	-0-	-0-
Total	\$3,401,630,809	\$441,122	\$ 129,198,454

	<u>Total Performance Incentive Fee</u>	<u>Total Fixed Fee</u>	<u>Total Earned Award Fee</u>
Previous	\$3,906,696	\$12,337,175	\$206,125,327
This Mod.	-0-	-0-	780,540
Total	\$3,906,696	\$12,337,175	\$206,905,867

	<u>Total Energy Cost Reduction Project Share</u>	<u>Small/Small Disadvantaged Incentive</u>	<u>Total KOR Share For Value Engineering</u>	<u>Total Earned Energy Savings Award Fee</u>
Previous	\$2,265,995	\$365,026	\$4,414,246	\$ 1,844,778
This Mod.	-0-	-0-	-0-	-0-
Total	\$2,265,995	\$365,026	\$4,414,246	\$ 1,844,778

	<u>Total Technical Performance Incentive Fee</u>	<u>Total Special Technical Performance Incentive Fee</u>	<u>Total Contract Value</u>	<u>Potential Award Fee</u>
Previous	\$7,302,096	\$3,000,000	\$3,772,831,724	\$ 802,199
This Mod.	-0-	-0-	780,540	(802,199)
Total	\$7,302,096	\$3,000,000	\$3,773,612,264	\$ -0-

**A. 900 Series Technical Directives Options** -For the continuation of System Test Activity requirements identified in Attachment J-6 Paragraph 4.0 of this contract beyond September 1996, the government may exercise the identified option below for the appropriate Fiscal Year:

	OPTION 1	OPTION 2	OPTION 3	OPTION 4	OPTION 5**
Period of Covered	10/1/96-9/30/97	10/1/97 - 9/30/98*	10/1/98 - 9/30/99	10/1/99 - 9/30/00	10/1/00 - 8/31/01
Target Costs	\$1,075,000	\$1,007,000	\$1,164,000	\$1,093,733	\$1,134,800
Target Fee	59,125	55,366	64,020	60,155	62,400
Potential AF	53,750	50,333	58,200	54,687	56,700
Total Option Value	\$1,187,875	\$1,112,699	\$1,286,220	\$1,208,575	\$1,253,900

\*During this period there are an additional 31,937 man-hours, non-fee bearing, negotiated and accounted for separately at a Target Cost of \$1,636,000 with no increase to Target Fee or Potential Award Fee.

\*\*The Government did not exercise Option 5 for FY01. In lieu thereof, 34,000 equivalent man-hours and associated Target Costs/Fee and Potential AF were incorporated via Supplemental Agreement 568.

**B.** The Contracting Officer may adjust the delivery rate of External Tanks by written notification to the contractor should the External Tank inventory reach 3 ETs at KSC and 3 ETs at MAF in storage. Based on the terms of notification, the contractor will take the necessary steps to reduce vendor deliveries and production in the most economical methods and submit a proposal for equitable contractual adjustment.

**B.3 CONTRACT FUNDING (18-52.232-81) (JUN 1990)**

(a) For purposes of payment of cost, exclusive of fee, in accordance with the Limitation of Funds clause, the total amount allotted by the Government to this contract is \$2,966,126,019. This allotment is for all effort and covers the following estimated period of performance: September 30, 2002.

(b) An additional amount of \$488,133,816 is obligated under this contract for payment of fee.

(End of clause)

**B.4 FIXED FEE, AWARD FEE AND INCENTIVE FEE**

(a) The total fixed fee of \$3,898,366 shall be payable upon execution of this contract. The balance of the fixed fee identified in Part I is payable as determined in accordance with the provisions of FAR Clause 52.216-8 as contained in Section I of the Contract. The contract fixed fee included in Part III shall be payable upon execution of contract modification 257.

(b) The award fee which is determined to be payable by the Fee Determination Officer (FDO) shall be payable upon notice of award to the contractor, receipt of contract modification and the submission of a fee voucher, subject to the withholding provisions of the clause hereof entitled - AWARD FEE (18-52.216-7007).

(c) Provisional payment of award fee may be made monthly based upon the percentable of completion of work as determined by the Contracting Officer, subject to the following limitation:

(1) Provisional payment of award fee will not exceed 80 percent of the amount available for the period. The contractor's fee vouchers must contain separate calculations supporting the billing for provisional award fee.

(2) However, whenever in the opinion of the Contracting Officer, the contractor's performance in the Evaluation Criteria indicates that the award fee to be earned, as later determined by the FDO, may be less than the provisional payment rate, the provisional payments will be based on such lesser fee as the Contracting Officer may unilaterally determine to be appropriate.

(3) Any award fee that is awarded by the FDO shall be payable as an adjustment, upward or downward, of the provisional payments to an amount equal to the fee awarded. In the event provisional award fee payments exceed the award fee amount earned for an evaluation period, the contractor will be prohibited from billing for provisional fee during the subsequent period(s) until the overpayment has been recouped. In the event such overpayment is (continued on B-5)

determined as a result of the final award fee period evaluation here under, the overpayment will be deducted from any remaining cost or fees owed, or reimbursed by the contractor.

(d) The total amount of fee to be paid under this contract or any Part (Part I, II, III, IV) thereof shall not exceed 15 percent nor be less than 0 percent of the estimated/target cost. Part III Target Fee including the earned Incentive Fee shall not exceed 10.9 percent of Part III Target Cost. Part IV Target Fee is identified in paragraph (h) below. For the purposes of determining maximum and minimum fee, the following are included: Earned Award Fee Target/Incentive Fee, Fixed Fee and Part V Small Business and Small Disadvantaged Business Incentive Fee and Energy Cost Reduction Earned Award Fee.

(e) In the event this contract is terminated for the convenience of the Government prior to a scheduled semi-annual award fee determination, the award fee for the evaluation period shall be prorated to the shortened performance period, based upon the percentage of the completion of work as determined by the Contracting Officer, and evaluated by the MSFC Performance Evaluation Board on that basis.

(f) Award Performance Evaluation

(1) The contractor's overall performance here under shall be evaluated semi-annually beginning October 1, 1993 through August 31, 2001 by the Performance Evaluation Board. The Board, after evaluating contractor performance, will report its findings and recommendations to the Fee Determination Official. This official will determine to what extent, the contractor's performance for the preceding period warrants payment from the award fee pool available.

(2) Evaluation by the Performance Evaluation Board shall be in accordance with Attachment J-8 entitled "Award Fee Evaluation Plan," which is attached hereto and hereby made a part of this contract. The Award Fee evaluation plan shall be submitted to the Contractor as a separate document.

(3) The Performance Evaluation Board's report of findings and the Fee Determination Official's decision will be in writing and shall be furnished to the contractor by the Contracting Officer. The report of findings shall set forth the Board's reasons for concluding that the award fee was earned or not earned, so that the contractor will know those areas of its operations which require improvement. Fee determinations by the Fee Determination Official shall not be subject to the "Disputes" clause of this contract and shall be final, except as to the matters of law.

(4) The Award Fee apportionment is identified by period in paragraph (i) below. The total potential Award Fee is separated

into two Award Fee Pools for the period January 1, 1988 December 31, 1992. Subparagraph (i) (1) identifies the apportionment of Performance Award Fee Pools and Subparagraph (i)(2) identifies the apportionment of the Cost Control Award Fee Pools. The Award Fee Pools at Subparagraph (i)(1) and (i)(2) are hereby made inactive as of December 31, 1992. Effective October 1, 1993, subparagraph (i)(3) "Management and Quality Performance" is in effect.

(g) The incentive fee payable under Part III of this contract shall be in accordance with the provisions of FAR Clause 52.216-10 Incentive Fee as contained in Section I Full Text Clauses. The Incentive provisions for the determination of the Government/Contractor share of the Underrun/Overrun are identified in the reference FAR Clause.

(h) The Cost Incentive Fee payable under Part IV of this contract shall be in accordance with the provisions of FAR Clause 52.216-10 Incentive Fee as contained in Section I Full Text Clauses. The fee payable under Part IV of this contract shall be the target fee increased by 20 cents for every dollar that the total allowable cost is less than the target cost and decreased by 50 cents for every dollar that the total allowable cost exceeds the target cost for one dollar to two million (\$1 to \$2,000,000). If the allowable costs exceeds the target cost by two million and one dollars (\$2,000,001) or more, no Target Fee for Part IV will be earned. In no event shall the Part IV Target Fee be increased to more than 1.95 percent of the Part IV Target Cost or be decreased to less than zero (0) percent of Part IV Target Cost.

(i) Performance Incentive Fee

(1) A Performance Incentive Fee will be paid to the Contractor for meeting the successful delivery criteria for External Tanks 116 – 121 as defined below.

(2) The On-time Delivery Performance Incentive Fee for each External Tank is earned by the Contractor upon Government acceptance (executed DD250) on or before the delivery date identified in accordance with the provisions of Attachment J-5, Delivery Schedule, of this contract. When an External Tank is available for acceptance on or before the delivery date the fee will be considered earned upon execution of the DD250. If a tank is not delivered in accordance with the provisions of this paragraph the contractor receives 0% of the fee for that tank.

(3) Acceptance of the External Tank is defined as delivery of the External Tank in compliance with the Specification as identified in Section C, Paragraph C-2 of this contract, excluding open work, and as modified by Waivers, Deviations or other appropriate method as demonstrated by the executed DD-250.

(4) The Contractor shall notify the Contracting Officer after completion of each identified event. The Financial Management Office upon receipt of the Contractor's Public Voucher will make payment to the Contractor.

- (5) The Performance Incentive Fee payable for On-time delivery is identified below:

ET	Potential Performance Incentive Fee	Earned Performance Incentive Fee
ET-116	\$ 651,116	\$ 651,116
ET-117	\$ 651,116	\$ 651,116
ET-118	\$ 651,116	\$ 651,116
ET-119	\$ 651,116	\$ 651,116
ET-120	\$ 651,116	\$ 651,116
ET-121	\$ 651,116	\$ 651,116
Total	\$ 3,906,696	\$ 3,906,696

(End of Clause)

Contract NAS8-36200  
Modification No. 321

(i) The amount of award fee which may be awarded pursuant to the provisions of this clause and the periods for which said fee applies, is set forth below:

(i)(1) - Performance Award Fee Pools

Period	Previous Amount Apportioned	Increase/ Decrease	New Apportionment	Earned	
				Amount	Percent
Jan 1, 1988 thru Jun 30, 1988	\$ 12,843,275	\$0	\$12,843,275	\$ 12,843,275	100.00%
Jul 1, 1988 thru Dec 31, 1988	3,797,805	0	3,797,805	3,607,915	95.00%
Jan 1, 1989 thru Jun 30, 1989	3,834,089	0	3,834,089	3,709,481	96.75%
Jul 1, 1989 thru Dec 31, 1989	11,227,739	0	11,227,739	10,441,797	93.00%
Jan 1, 1990 thru Jun 30, 1990	12,919,894	0	12,919,894	12,015,501	93.00%
Jul 1, 1990 thru Dec 31, 1990	10,579,359	0	10,579,359	10,209,081	96.50%
Jan 1, 1991 thru Jun 30, 1991	12,212,093	0	12,212,093	11,723,609	96.00%
Jul 1, 1991 thru Dec 31, 1991	15,171,948	0	15,171,948	14,125,084	93.10%
Jan 1, 1992 thru Jun 30, 1992	15,008,613	0	15,008,613	13,958,010	93.00%
Jul 1, 1992 thru Dec 31, 1992	0	0	0	0	***
Subtotal	\$ 97,594,815	\$0	\$97,594,815	\$92,633,753	
Adjustment for Part II	(\$36,409)		(\$36,409)		
	\$ 97,558,406		\$97,558,406		
Jan 1, 1993 thru Jun 30, 1993	\$ 19,447,196	(\$19,447,196)	0		
Jul 1, 1993 thru Dec 31, 1993	21,349,758	(21,349,758)	0		
Jan 1, 1994 thru Jun 30, 1994	16,917,604	(16,917,604)	0		
Jul 1, 1994 thru Dec 31, 1994	16,469,773	(16,469,773)	0		
Jan 1, 1995 thru Jun 30, 1995	15,735,001	(15,735,001)	0		
Jul 1, 1995 thru Dec 31, 1995	14,259,754	(14,259,754)	0		
Jan 1, 1996 thru Jun 30, 1996	13,384,801	(13,384,801)	0		
Jul 1, 1996 thru Dec 31, 1996	12,627,668	(12,627,668)	0		
Jan 1, 1997 thru Jun 30, 1997	11,833,459	(11,833,459)	0		
Jul 1, 1997 thru Dec 31, 1997	3,946,326	(3,946,326)	0		
Jan 1, 1998 thru Jun 30, 1998	46,277	(46,277)	0		
Jul 1, 1998 thru Dec 31, 1998	17,597	(17,597)	0		
	\$243,593,620	(\$146,035,214)	\$97,558,406	\$92,633,753	

\* This award fee period includes performance for Exhibit "O" in Contract NAS8-33708

\*\*This award fee period includes twelve months for the Production Effort performance which began January 1, 1989

\*\*\*The Contractor earned a numerical rating of 94.9 percent for the period July 1, 1992 thru December 31, 1992.

There was \$-0- award fee apportioned to the stated period



(i)(2) - Cost Control Award Fee Pools

Period	Previous Amount Apportioned	Increase/ Decrease	New Apportionment	Earned	
				Amount	Percent*
Jul 1, 1990 thru Dec 31, 1990	\$4,531,515	0	\$4,531,515	\$4,078,364	90.00%
Jan 1, 1991 thru Jun 30, 1991	4,730,445	0	4,730,445	4,257,400	90.00%
Jul 1, 1991 thru Dec 31, 1991	6,406,261	0	6,406,261	5,953,653	91.20%
Jan 1, 1992 thru Jun 30, 1992	6,427,054	0	6,427,054	6,391,760	93.60%
Jul 1, 1992 thru Dec 31, 1992	0	0	0	0	
Subtotal	\$22,095,275	\$0	\$22,095,275		
Adjustment for Part II	(37,222)		(37,222)	1,376,876	
	\$22,058,053		\$22,058,053	\$22,058,053	100.00%
Jan 1, 1993 thru Jun 30, 1993	8,257,382	(8,257,382)	0		
Jul 1, 1993 thru Dec 31, 1993	9,048,896	(9,048,896)	0		
Jan 1, 1994 thru Jun 30, 1994	7,182,223	(7,182,223)	0		
Jul 1, 1994 thru Dec 31, 1994	6,992,236	(6,992,236)	0		
Jan 1, 1995 thru Jun 30, 1995	6,680,032	(6,680,032)	0		
Jul 1, 1995 thru Dec 31, 1995	6,046,837	(6,046,837)	0		
Jan 1, 1996 thru Jun 30, 1996	5,683,511	(5,683,511)	0		
Jul 1, 1996 thru Dec 31, 1996	5,239,512	(5,239,512)	0		
Jan 1, 1997 thru Jun 30, 1997	4,827,185	(4,827,185)	0		
Jul 1, 1997 thru Dec 31, 1997	1,917,762	(1,917,762)	0		
Jan 1, 1998 thru Jun 30, 1998	40,947	(40,947)	0		
Jul 1, 1998 thru Dec 31, 1998	6,579	(6,579)	0		
	\$83,981,155	(\$61,923,102)	\$22,058,053	\$0	

\*Percent earned as determined by the provisions of Attachment J-8, Paragraph 5.3 Cost Control

(i)(3) - Management and Quality Control Award Fee Pools

Period	Previous Amount Apportioned	Increase/ Decrease	New Apportionment	Earned		Cumulative Amount
				Amount	Percent*	
Oct 1, 1993 thru Mar 31, 1994	\$6,609,285	\$	\$0	\$6,106,979	92.40%	\$ 6,106,979
Apr 1, 1994 thru Sept 30, 1994	6,798,138	0	0	6,356,259	93.50%	12,463,238
Oct 1, 1994 thru Mar 31, 1995	7,078,418	0	0	6,611,242	93.40%	19,074,480
Apr 1, 1995 thru Sept 30, 1995	7,651,151	0	0	7,123,222	93.10%	26,197,702
Oct 1, 1995 thru Mar 31, 1996	8,889,860	0	0	8,294,239	93.30%	34,491,941
Apr 1, 1996 thru Sept 30, 1996	8,163,519	0	0	7,428,802	91.00%	41,920,743
Oct 1, 1996 thru Mar 31, 1997	7,430,288	0	0	6,910,168	93.00%	48,830,911
Apr 1, 1997 thru Sept 30, 1997	7,878,936	0	0	6,460,727	82.00%	55,291,638
Oct 1, 1997 thru Mar 31, 1998	7,705,522	0	0	6,056,540	78.60%	61,348,178
Apr 1, 1998 thru Sept 30, 1998	6,948,545	0	0	5,725,601	82.40%	67,073,779
Oct 1, 1998 thru Mar 31, 1999	6,728,501	0	0	4,884,892	72.60%	71,958,671
Apr 1, 1999 thru Sept 30, 1999	8,324,490	0	0	6,817,757	81.90%	78,776,428
Oct 1, 1999 thru Mar 31, 2000	7,379,706	0	0	5,829,968	79.00%	84,606,396
Apr 1, 2000 thru Sept 30, 2000	4,620,039	0	0	4,042,996	87.51%	88,649,392
Oct 1, 2000 thru Mar 31, 2001	2,315,430	0	0	2,046,840	88.40%	90,696,232
Apr 1, 2001 thru Mar 31, 2002	872,531	0	0	737,289	84.50%	91,433,521
Apr 1, 2002 thru Sept 30, 2002	802,199	0	0	780,540	97.30%	92,214,061
	<u>\$106,196,558</u>	<u>\$0</u>	<u>\$0</u>			

(i)(4) Small/Small Disadvantaged Business Award

CY91 Small and Small Disadvantaged  
CY92 Small and Small Disadvantaged

(i)(6) Long Lead Materials/Hardware

(See Attachment J-19)

(i)(5) Energy Cost Reduction Fee

FY91 Energy Cost Reduction	\$ 235,152
FY92 Energy Cost Reduction	\$ 243,279
FY93 Energy Cost Reduction	\$ 292,586
FY94 Energy Cost Reduction	\$ 221,411
FY95 Energy Cost Reduction	\$ 101,765
FY96 Energy Cost Reduction	\$ 121,154
FY97 Energy Cost Reduction	\$ 74,494
FY98 Energy Cost Reduction	\$ 52,974
FY99 Energy Cost Reduction	\$ 58,153
FY00 Energy Cost Reduction	<u>\$137,573</u>
	<u>\$1,538,541</u>

3.5 TECHNICAL PERFORMANCE INCENTIVE FEE - SUPER LIGHTWEIGHT  
EXTERNAL TANK PROGRAM NON-RECURRING EFFORT - PART IV

(a) The provisions for the Technical Performance Incentive Fee applicable to Attachment J-17 for the Non-recurring Effort for the Super Lightweight External Tank Program are established in Attachment J-18 of this Contract.

(End of Clause)

B.6 PERFORMANCE GATE

Notwithstanding the provisions set forth in clause B.4 -- Fixed Fee, Award Fee, and Incentive Fee, if the numerical rating assigned to the Quality criterion as determined by the MSFC Fee Determination Officer for any evaluation period is not at least a rating of ~~the~~ (b)(4) the Contractor shall not be eligible to receive any Part III fee (award or incentive) for that period.

(End of Clause)

B.7 RESERVED

B.8 ENERGY COST REDUCTION PROGRAM

The Contractor's share of savings payable for negotiated Energy Cost Reduction proposals will be reflected in Article B-2 pursuant to the provisions of Attachment J-14 entitled Energy Cost Reduction Program. Upon receipt of executed contract modification, the Contractor shall submit a voucher for payment.

B.9 VALUE ENGINEERING

The Contractor's share of savings payable for negotiated Value Engineering proposals will be reflected in clause B.2 pursuant to the provisions of clause H.34 - Value Engineering and clause I.3 FAR Clause 52.248-1 Value Engineering (Apr. 1984). The Contractor shall submit a request for contract modification to add per unit Net Acquisition Savings (NAS) share to Contract Value upon delivery of each sharing unit. Upon receipt of executed contract modification, the Contractor shall submit a voucher for payment on each sharing unit.

(End of Clause)

B.10 RESERVED

## SECTION C

### DESCRIPTION/SPECIFICATIONS/STATEMENT OF WORK

#### C-1 STATEMENT OF WORK

The Contractor shall, on the terms and conditions hereinafter more particularly set forth, furnish the necessary management, labor, and materials (except as specified herein to be furnished by the Government) and do all things necessary and/or incidental to performance of the work set forth in PART I - THE SCHEDULE, PART II - CONTRACT CLAUSES AND PART III - LIST OF DOCUMENTS, EXHIBITS AND OTHER ATTACHMENTS.

#### C-2 SPECIFICATIONS, STANDARDS AND PROCEDURES

(a) The work delineated herein shall be performed for the production of External Tanks 61 through 94 (ET-61 through ET-94) in accordance with the Prime Equipment Detail Specification, Part I, Performance Design, Verification and Acceptance Requirements, External Tank (LWT-1 and Subs)(CEI No. T01M09A) for the Space Shuttle Program, dated April 9, 1980 (through SCN 321) and Prime Equipment Detail Specification, part II, Product Configuration, Acceptance and Preparation for Delivery Requirements, External Tank (LWT-1 and Subs)(CEI No. T01M09A) for Space Shuttle Program dated May 3, 1983 (through SCN 061), which reference required specifications, standards, procedures and plans. Deviations, exceptions and changes to specifications, standards, procedures and plans will be specifically tracked and incorporated into the appropriate documents.

(b) The work delineated herein shall be performed for the Aluminum Lithium Test Article as baselined by the addition of Addendum "A" to CPT01M09A (Part I) - Prime Equipment Detail Specification, Part I, Performance Design, Verification and Acceptance Requirements External Tank (CEI No. T01M09A) for the Space Shuttle Program and the production of External Tanks 96 through 121 (ET-96 through ET-121) Super Light Weight External Tank (SLWT) as baselined by the addition of Appendix 40 to CPT01M09A (Part I) - Prime Equipment Detail Specification, Part I, Performance Design, Verification and Acceptance Requirements, External Tank (CEI No. T01M09A) for the Space Shuttle Program and CPT01M09A - Part II, Prime Equipment Detail Specification, Part II, Product Configuration, Acceptance and Preparation for Delivery Requirements, External Tank (LWT-1 and Subs) (CEI No. T01M09A) for Space Shuttle Program, dated May 3, 1983, which reference required specification, standards, procedures and plans. Deviations, exceptions and changes to specifications, standards, procedures and plans will be specifically tracked and incorporated into the appropriate documents.

(c) The aforementioned specifications, standards, procedures and plans as applicable shall be invoked on subcontractors and suppliers for articles, services and materials.

(d) The non-recurring effort for the Super Lightweight External Tank (SLWT) was incorporated into the contract by Supplemental Agreement 321. The Recurring effort for the SLWT was incorporated by Contract Modification 355.

SECTION D

PACKAGING AND MARKING

D-1 PACKING AND PACKAGING

(a) Packing, packaging, identification and marking, and preparation for shipment of all hardware items to be delivered under the terms of this contract shall be in accordance with the Safety, Reliability and Quality Requirements and Implementation Document for the External Tank (MMC-ET-RA03-C and NHB 6000.1). Packaging shall be labeled with a warning if potentially hazardous or delicate material is involved.

(b) Shipping Instructions not provided elsewhere herein will be furnished by the Contracting Officer or his duly authorized representative. The Contractor shall request same no later than thirty (30) days prior to the date item(s) are ready for shipment.

(End of clause)

(END OF SECTION)

SECTION E

INSPECTION AND ACCEPTANCE

E-1 LISTING OF CLAUSES INCORPORATED BY REFERENCE

NOTICE: The following clause is hereby incorporated by reference:

52.246-8      Inspection of Research and Development --  
                    Cost-Reimbursement (Apr 1984)

(End of Clause)

E.2 MATERIAL INSPECTION AND RECEIVING REPORT (18-52.246-72)  
(OCT 1988)

(a) At the time of each delivery under this contract, the Contractor shall furnish to the Government a Material Inspection and Receiving Report (DD Form 250 series). The Contractor shall distribute the DD Form 250 series as follows:

<u>Distribution to:</u>	<u>No. Copies</u>
Defense Contract Administration Officer (or other appropriately named Government Inspection Office)	2
Contracting Officer	1
Transportation Officer, AD40	1
ET Project Manager	1
ET Resident Manager	1
Shuttle Configuration Management, ED43	1
Consignee	1
Attached to shipment (on Box #1)	4

(b) The Contractor shall prepare the DD Form 250 in accordance with NASA FAR Supplement 18-46.672-1. The Contractor shall enclose the copies of the DD Form 250 in the package or seal them in a waterproof envelope which shall be securely attached to the exterior of the package in the most protected location.

(c) When more than one package is involved in a shipment, the Contractor shall list on the DD Form 250, as additional information, the quantity of packages and the package numbers. The Contractor shall forward the DD Form 250 with the lowest numbered package of the shipment and print the words "CONTAINS DD FORM 250" on the package.

(End of clause)

E.3 PLACE OF FINAL INSPECTION AND ACCEPTANCE

The place of final inspection and acceptance for the work called for under this contract shall be the Michoud Assembly Facility, New Orleans, Louisiana. Inspection and acceptance of any deliverable reports will be accomplished by the Contracting Officer or designee at the prescribed destination for such reports.

(End of clause)

(END OF SECTION)



## SECTION F

### DELIVERIES OR PERFORMANCE

#### F.1 LISTING OF CLAUSES INCORPORATED BY REFERENCE

NOTICE: The following clause is hereby incorporated by reference:

52.212.13 Stop-Work Order (Aug 1989) -- Alternate I (Apr 1984)

(End of Clause)

#### F.2 PERIOD OF PERFORMANCE

(a) The Contractor shall perform the Preproduction Effort called for under the contract (Sections "A" through "J" inclusive) during the term of performance of this contract beginning November 2, 1984, and continuing through six months prior to the delivery of ET-121 excluding closeout effort.

For the period of November 2, 1984, through December 31, 1987, the Contractor performed Long-Lead Effort (as defined in Attachment J-1, Paragraph 2.1) under Exhibit "O" of Contract NAS8-33708. All work performed, technical direction given, costs incurred, funding allotted and payments made under Exhibit "O" to Contract NAS8-33708 will be deemed to have been performed, given, incurred, or made under this contract. This effort is hereby transferred to and made an integral part of this contract.

(b) The Contractor shall perform the effort required to manufacture, assemble, test, and deliver 60 External Tanks (ET-61 through ET-121) and other effort in support of the production of External Tanks as identified under the contract (Sections "A" through "J" inclusive) during the period of performance of January 1, 1989, and continuing through September 30, 2002 or as defined in Section J, Attachment J-5 of this contract, excluding close-out activities.

(End of clause)

#### F.3 PLACE OF PERFORMANCE

Work under this contract will be performed at the following locations: NASA Michoud Assembly Facility, Subcontractor's plants, Kennedy Space Center, the Shuttle Integrating Contractor's Plant, and the MSFC OSF Automated Data Processing Consolidated Center.

F.4 F.O.B. POINT

FOR DATA: George C. Marshall Space Flight Center  
Marshall Space Flight Center, AL 35812

or

Kennedy Space Center (KSC)  
Kennedy Space Center, FL 32899

(Destination to be specified in data requirement or will be provided by the Contracting Officer)

FOR SUPPLIES: Michoud Assembly Facility  
New Orleans, LA 70189

(End of clause)

F.5 FLIGHT HARDWARE DELIVERY

The Contractor shall perform all Effort as defined in Attachment J-1, necessary to produce and delivery External Tanks ET-61 through ET-121 in accordance with the delivery schedule, Attachment J-5, attached hereto. It is contemplated that External Tanks will be shipped to the launch site within 45 days after acceptance (DD-250). The Government reserves the right not to accept delivery (DD-250) of the tank earlier than 120 days prior to the delivery date specified in Attachment J-5. Any change to this plan will be subject of separate contractual action.

(End of clause)

F.6 OPTION TO EXTEND SYSTEM TEST ACTIVITY

(a) The Government may extend the term of the System Test Activity (Attachment J-6 Paragraph 4.0) by written notice to the Contractor within 30 days of the beginning of the Option Period; (identified in Clause B.2 Paragraph VI) provided, that the Government shall give the Contractor a preliminary written notice of its intent to extend by 60 days preceding the beginning of the Option Period. The preliminary notice does not commit the Government to an extension.

(b) If the Government exercises this option, the extended effort shall be considered to include this option provision.

(End of clause)

(END OF SECTION)

SECTION G

CONTRACT ADMINISTRATION DATA

G.1 SUBMISSION OF VOUCHERS FOR PAYMENT (18-52.216-87) (DEC 1988)

(a) Public vouchers for payment of costs shall include a reference to this contract NAS8-36200 and be forwarded to:

Financial Management Office

Attn.: RS23

George C. Marshall Space Flight Center, NASA

Marshall Space Flight Center, AL 35812

This is the designated billing office for cost vouchers for purposes of the Prompt Payment clause of this contract.

(b) The Contractor shall prepare vouchers as follows:

(1) One original Standard Form (SF) 1034, SF 1035, or Equivalent Contractor's attachment.

(2) Seven copies of SF 1034A, SF 1035A, or equivalent Contractor's attachment.

(3) The Contractor shall mark SF 1034A copies 1, 2, 3, 4, and such other copies as may be directed by the Contracting Officer by insertion in the memorandum block the names and addresses as follows:

- (i) Copy 1 NASA Contracting Officer;
- (ii) Copy 2 Auditor;
- (iii) Copy 3 Contractor;
- (iv) Copy 4 Contract administration office; and
- (v) Copy 5 Project management office

(c) Public vouchers for payment of fee shall be prepared similarly and be forwarded to:

Procurement Office

Attn.: PS42

George C. Marshall Space Flight Center, NASA

Marshall Space Flight Center, AL 35812

This is the designated billing office for fee vouchers for purposes of the Prompt Payment clause of this contract.

(d) In the event that amounts are withheld from payment in accordance with provisions of this contract, a separate voucher for the amount withheld will be required before payment for that amount may be made.

(End of clause)

G.2 TECHNICAL DIRECTION (18-52.242-70)(SEP 1993)

(a) Performance of the work under this contract is subject to the written technical direction of the Contracting Officer Technical Representative (COTR), who shall be specifically appointed by the Contracting Officer in writing in accordance with NASA FAR Supplement 18-42.270. "Technical direction" means a directive to the Contractor that approves approaches, solutions, designs, or refinements; fills in details or otherwise completes the general description of work or documentation items; shifts emphasis among work areas or tasks; or furnishes similar instruction to the Contractor. Technical direction includes requiring studies and pursuit of certain lines of inquiry regarding matters within the general tasks and requirements in Section J of this contract.

(b) The COTR does not have the authority to, and shall not, issue any instruction purporting to be technical direction that --

- (1) Constitutes an assignment of additional work outside the statement of work;
- (2) Constitutes a change as defined in the changes clause;
- (3) Constitutes a basis for any increase or decrease in the total estimated contract cost, the fixed fee (if any), or the time required for contract performance;
- (4) Changes any of the expressed terms, conditions, or specifications of the contract; or
- (5) Interferes with the Contractor's rights to perform the terms and conditions of the contract.

(c) All technical direction shall be issued in writing by the COTR.

(d) The Contractor shall proceed promptly with the performance of technical direction duly issued by the COTR in the manner prescribed by this clause and within the COTR's authority. If, in the Contractor's opinion, any instruction or direction by the COTR falls within any of the categories defined in paragraph (b) above, the Contractor shall not proceed but shall notify the Contracting Officer in writing within 5 working days after receiving it and shall request the Contracting Officer to take action as described in this

clause. Upon receiving this notification, the Contracting Officer shall either issue an appropriate contract modification within a reasonable time or advise the Contractor in writing within 30 days that the instruction or direction is --

(1) Rescinded in its entirety; or

(2) Within the requirements of the contract and does not constitute a change under the Changes clause of the contract, and that the Contractor should proceed promptly with its performance.

(e) A failure of the Contractor and Contracting Officer to agree that the instruction or direction is both within the requirements of the contract and does not constitute the change under the Changes clause, or a failure to agree upon the contract action to be taken with respect to the instruction or direction, shall be subject to the Disputes clause of this contract.

(f) Any action(s) taken by the Contractor in response to any direction given by any person other than the Contracting Officer or the COTR shall be at the Contractor's risk.

(End of clause)

### G.3 GOVERNMENT PROVIDED FACILITIES, PROPERTY AND SERVICES

Pursuant to the contract clause entitled "Government property," the Government will provide to the Contractor in performance of this contract at no charge those Facilities, Special Tools, Special Test Equipment, miscellaneous Government property and Government Provided Services referenced in Attachment J-4 (Government Provided Facilities, Property and Services) which is attached hereto and hereby made a part of this contract. The subcontractors/suppliers identified in Attachment J-4, Appendix I Supplier List are authorized "no charge" use of "by item listed" Government Provided Property/Services in the performance of their subcontracts.

(End of clause)

### G.4 INFORMATION RELEASES AND PUBLICATIONS

During the performance of this contract, if data relating to this contract are proposed to be used in oral or written presentations at professional meetings, seminars, and symposia, or in articles to be published in professional, scientific, and technical journals, or similar media, the Contractor will request a review by the Marshall Space Flight Center of such publications. Such requests should be forwarded to the Marshall Space Flight Center's Media Relations Office (Code CD) at least four (4) weeks in advance of the desired MSFC response date, to provide sufficient time for review and comments to the Contractor

(End of clause)

G.5 CONTRACTOR EMPLOYEE BADGING AND EMPLOYMENT TERMINATION  
CLEARANCE (MSFC -- 52.204-90)(JAN 1989)

(a) It is anticipated that performance of the requirements of this contract will require employee access to and picture badging by the Marshall Space Flight Center. Contractor requests for badging of employees shall be by MSFC Form 1739-1, Visit Request and Badge Application Card. Requests for badging shall be submitted to the attention of MP31, or to the appointed Contracting Officer Technical Representative for completion and approval prior to staffing by the MSFC Security Division.

(b) The Contractor shall establish procedures to ensure that each badged employee is properly cleared in accordance with MSFC Form 383-1, "Contractor Employee Clearance Document, " prior to finalization of employment termination.

(c) Requests for copies of MSFC Forms 383-1, and 1739 shall be directed to the MSFC Security Division, Marshall Space Flight Center, Alabama 35812.

(End of clause)

G.6 DESIGNATION OF NEW TECHNOLOGY REPRESENTATIVE AND PATENT  
REPRESENTATIVE (18-52.227-72)(APR 1984)

(a) For purposes of administration of the clause of this contract entitled "New Technology" or "Patent Rights -- Retention by the Contractor (Short Form)," whichever is included, the following named representatives are hereby designated by the Contracting Officer to administer such clause:

New Technology Representative -

New Technology Representative, CD30  
George C. Marshall Space Flight Center  
Marshall Space Flight Center AL 35812

Patent Representative -

Chief, Intellectual Property Counsel, LS01  
George C. Marshall Space Flight Center  
Marshall Space Flight Center, AL 35812

(b) Reports of reportable items, and disclosure of subject inventions, interim reports, final reports, utilization reports, and other reports required by the clause, as well as any correspondence with respect to such matters, should be directed to the New Technology Representative unless transmitted in response to

correspondence or request from the Patent Representative. Inquiries or requests regarding disposition of rights, election of rights, or related matters should be directed to the Patent Representative. This clause shall be included in any subcontract hereunder requiring a "New Technology" clause of "Patent Rights -- Retention by the Contractor (Short Form)" clause, unless otherwise authorized or directed by the Contracting Officer. The respective responsibilities and authorities of the above-named representatives are set forth in 18-27.375-3 of the NASA FAR Supplement.

(End of clause)

**G.7 FINANCIAL REPORTING OF GOVERNMENT-OWNED/CONTRACTOR-HELD PROPERTY (18-52.245-73)(JUL 1994)**

(a) The contractor shall prepare and submit annually a NASA Form 1018, Report of Government-owned/Contractor-Held Property, in accordance with 18-45.505-14 and the instructions on the form and in section 18-45.7101 of the NASA FAR Supplement, except that the reporting of space hardware shall be required only as directed in clause 18-52.245-78, Space Hardware Reporting, of this contract, if applicable.

(b) If administration of this contract has been delegated to the Department of Defense, the original of NASA Form 1018 shall be submitted to the NASA installation Financial Management Officer and three copies shall be sent concurrently through the DOD Property Administrator to the NASA office identified below. If the contract is administered by NASA, the original of NASA Form 1018 shall be submitted to the installation Financial Management Officer and three copies shall be sent concurrently to the following NASA office:

PS12/Contract Property  
National Aeronautics and Space Administration  
George C. Marshall Space Flight Center  
Marshall Space Flight Center, AL 35812

(c) The annual reporting period shall be from October 1 of each year to September 30 of the following year. The report shall be submitted by October 31.

(d) The Contractor agrees to insert the reporting requirement in all first-tier subcontracts, except that such requirement shall provide for the submission of the subcontractor's reports to the Contractor, not to the Government. The Contractor shall require the subcontractors' reports to be submitted in sufficient time to meet the reporting date in the paragraph (c) above.

(e) The Contractor's report shall consist of a consolidation of subcontractors' reports and the Contractor's own report.

(End of clause)

(END OF SECTION)

## SECTION H

### SPECIAL CONTRACT REQUIREMENTS

#### H.1 MERGER IMPACT SAVINGS CLAUSE

##### (a) General Electric Merger Impact

The business combination of the Martin Marietta Corporation and certain former General Electric entities has resulted in revised forecasts in Corporate/Group Office Expenses which have not been incorporated into the negotiated contract value. Upon agreement between the Corporate Administrative Contracting Officer (CACO) and the Martin Marietta Corporation and upon notification by the Government, the Contractor shall submit a proposal addressing only the cost impact resulting from the effect of the acquisition.

NOTE: Paragraph H.1(a) is deactivated by incorporation of contract Modification 320.

##### (b) Lockheed Merger Impact

The business combination of the Martin Marietta Corporation and the Lockheed Corporation may result in revised forecasts in Corporate/Group Office Expenses which have not been incorporated into the negotiated contract value. Upon Agreement between the Corporate Administrative Contracting Officer (CACO) and the Lockheed-Martin Corporation and upon notification by the Government, the Contractor shall submit a proposal addressing only the cost impact resulting from the effect of the acquisition for work incorporated into the contract after Contract Modification 320.

##### (c) Loral Merger Impact

The business combination of the Lockheed Martin Corporation and the Loral Corporation may result in revised forecasts in Corporate/Group Office Expenses which have not been incorporated into the negotiated contract value. Upon agreement between the Corporate Administrative Contracting Officer (CACO) and the Lockheed-Martin Corporation and upon notification by the Government, the Contractor shall submit a proposal addressing only the cost impact resulting from the effect of the acquisition for work incorporated into the contract from Contract Modification 380 through Contract Modification 419.

(End of Clause)



#### H.2 MAKE-OR-BUY PROGRAM

The Make-or-Buy Plan contemplated by the clause of this contract entitled "Changes or Additions to Make-or-Buy Program" shall be as described in Attachment J-2, "Make-or-Buy Plan," attached hereto and hereby made a part of this contract.

(End of clause)

#### H.3 SPECIAL PROVISION FOR CONTRACT CHANGES

(a) The parties agree that, notwithstanding the provisions of the "Changes -- Cost Reimbursement -- Alternate V" clause of this contract, no change made under this contract shall give rise to an equitable adjustment in the estimated cost, fee, delivery or any other contract provisions, when said change causes an increase or decrease of \$250,000 or less in the estimated cost of the change, regardless of the allocation of cost between contracts. Each change shall be controlling in making this determination and such change shall not be added to any other change(s). The parties recognize that several changes may be grouped together for definitization; however, the dollar value of each individual change will be controlling in determining whether or not an equitable adjustment is in order. The foregoing shall not limit the rights of either party to an equitable adjustment to the extent specifically provided for in any provision of this contract other than the "changes -- Cost Reimbursement -- Alternate V" clause.

(b) Engineering Change Proposals (ECP's) or Project Change Proposals (PCP's) affecting configuration changes with an initial estimated cost within the dollar threshold stipulated in A above and which do not change contract language shall be approved and transmitted to the Contractor by written directive signed by the NASA Contracting Officer Technical Representative or his designated alternate.

(End of Clause)

H.4 Reserved

#### H.5 SUBMITTAL OF DPD DATA ITEMS

(a) Data Procurement Document

The Contractor shall furnish all data items identified and described by "Data Procurement Document (DPD)" 660. Each data item shall be prepared in accordance with the requirement stated by the appropriate Data Requirement (DR) which shall govern the format, content, number of copies, frequency of revision, etc. In addition, the DPD will contain provisions for unit cost reporting.

NOTE: The Contractor shall comply with all data requirements of this contract whether or not listed in the DPD.

(b) Distribution of DPD Data Items

All DPD data items shall be distributed as follows:

Type I and II DPD Data Items

Type I and II data items shall be submitted to the George C. Marshall Space Flight Center, Marshall Space Flight Center, Alabama 35812, Code AS21D, as follows:

(1) Drawings and associated documents shall be submitted on roll microfilm, accompanied by log sheets. Microfilm shall be Type I, Class I. Microfilm and log sheets shall be prepared in accordance with NHB 1440.4A.

(2) Balance of Distribution - Unless otherwise directed by contractual provisions, the remaining copies of the DPD Data items shall be distributed as provided in the DPD.

(End of clause)

H.6 FINANCIAL MANAGEMENT REPORTING

(a) Financial Management Reports shall be submitted in accordance with the clause of this contract entitled, "NASA Contractor Financial Management Reporting" (18-52.204-71).

(b) The Contractor's automated printout reports may be substituted for the NASA Form 533 reporting formats by the mutual agreement of External Project Office and the Contractor.

(End of clause)

#### H.7 HANDLING OF DATA

(a) It is anticipated that in performance of this contract, the Contractor may have access to and use of the following type of information and data:

- (1) NASA's Financial and Management information and such information of other parties contained in or furnished under NASA contracts or agreements.
- (2) Proposals, both solicited and unsolicited, submitted to NASA by other parties.
- (3) Data submitted to ANSA with restrictive legends.
- (4) Personal information on employees.

(b) Therefore, in furtherance of NASA's data handling policies to protect the interest of the Government and other parties with respect to such information and data, Contractor agrees:

- (1) Not to knowingly disclose the above types of data and information to the public; and,
- (2) To abide by the conditions of restrictive legends contained on any data in the above categories.

(c) These restrictions do not limit the Contractor's right to use and disclose any data and information obtained from another source without restriction.

(End of clause)

#### H.8 OBSERVANCE OF REGULATIONS (AT MSFC)

In performing any capacity while on site at MSFC, and such other locations as may be approved by the Contracting Officer, the Contractor will comply with all applicable MSFC regulations and procedures, and those of Redstone Arsenal, Alabama (RSA) which also apply to MSFC Government and Contractor personnel.

(End of clause)

#### H.9 SUBCONTRACTING PLAN FOR SMALL BUSINESS AND SMALL DISADVANTAGED BUSINESS CONCERNS

The Contractor shall implement a Small Business and Small Disadvantaged Business Subcontracting Program in accordance with Attachment J-3 entitled, "Small Business and Small Disadvantaged Business Concerns Subcontracting Plan", attached hereto and hereby made a part of this contract.

(End of clause)

H.10 POTENTIALLY HAZARDOUS ITEMS

(a) Pursuant to the clause of this contract entitled, "Hazardous Material Identification and Material Safety Data," the following item(s) are designated as potentially hazardous:

THE EXTERNAL TANK

(b) Said clause shall apply to those items listed above for which the Contractor has design responsibility. However, the Contractor's systems and procedures for handling the above listed items will reflect either the design information furnished by the Government as GFP for items provided by the Government or furnished by the Contractor for the items supplied by the Contractor.

(End of clause)

H.11 KEY SUBCONTRACTORS

For the purpose of this article, and such other provisions of this contract wherein it appears, the term "Key Subcontractor" is defined as a subcontractor who is considered essential to the performance of the work under this contract by reason of possessing an exclusive or a predominant capability to provide the required supplies, services and/or processes at the time(s) and in the manner specified. The following firms are hereby identified as key subcontractors:

KEY SUBCONTRACTORS/SUPPLIERS

FIRM

ITEM

(b)(4)

FIRM

ITEM

(b)(4)

(End of clause)

H.12 KEY PERSONNEL AND FACILITIES (18-52.235-71)(MAR 1989)

(a) The personnel and/or facilities listed below are considered essential to the work being performed under this contract. Before removing, replacing, or diverting any of the listed or specified personnel or facilities, the Contractor shall (1) notify the Contracting Officer reasonably in advance and (2) submit justification (including proposed substitution) in sufficient detail to permit evaluation of the impact on this contract.

(b) The Contractor shall make no diversion without the Contracting Officer's written consent; provided, that the Contracting Officer may ratify in writing the proposed change, and such ratification shall constitute the Contracting Officer's consent required by this clause.

(c) The list of personnel and/or facilities shown below may, with the consent of the contracting parties, be amended from time to time during the course of the contract to add or delete personnel and/or facilities.

KEY PERSONNEL

POSITION/TITLE

(b)(4)

## FACILITIES

- 1) Michoud Assembly Facility
- 2) Marshall Space Flight Center
- 3) Kennedy Space Flight Center
- 4) Marshall Space Flight Center Office of Space Flight  
Automated Data Processing Consolidated Center
- 5) Stennis Space Center

(End of clause)

## H.13 LIABILITY FOR GOVERNMENT-OWNED PROPERTY

In the event that any of the Contractor's employees are authorized or required to perform work on any Government-owned property (other than "Government-Furnished Property" as defined in the Government Property Clause of this contract) in connection with the performance of work under this contract, the Contractor will be held responsible for said property, to the same extent and in the same manner as is described in the clause of this contract entitled "Government Property."

(End of clause)

## H.14 CLOSEOUT EFFORT

The parties hereto agree that the estimated cost and fee of this contract does not include administrative effort to transfer to a successor Contractor and does not include any provision for "closeout effort". In the event such effort is required, or in the event of termination, and to the extent such costs may be allowable pursuant to Part 31 of the Federal Acquisition Regulation (FAR) and NASA Supplement, the extent of such effort and the costs and any fee associated therewith shall be the subject of a separate contractual action. If there is not to be a successor contract for delivery of additional External Tanks, beginning with ET-122, the Contractor will be notified in writing no later than 10 days following the DD-250 date of ET-96. Within 60 days following receipt of the notification that there will not be a successor contract to this contract, the Contractor will submit a plan and a proposal for closeout and the Contract shall be equitably adjusted. Notwithstanding any other provisions of this contract, no effort for disposition of Government Property will be required beyond the period of performance of this contract as set forth in Article F-4 -- Delivery, except delivery to the Government of the Contractor's current inventory schedules.

(End of clause)

#### H.15 DELIVERY ADJUSTMENTS

The parties agree that the Contracting Officer, may by written order, in accordance with the requirements of this article, make changes in the completion of delivery dates of this contract as a result of production stretch out. If any such changes cause an increase or decrease in the estimated cost of this contract, or otherwise affects any other provision of this contract, whether changed or not changed by any such order, an equitable adjustment shall be made (i) in the estimated cost, (ii) in the amount of any fee to be paid to the Contractor, (iii) in such provisions of the contract as may be affected, and the contract shall be modified in writing accordingly. Any claim by the Contractor for adjustment under this clause must be asserted within sixty (60) days from the date of receipt by the contractor of the notification of change; provided, however, that the Contracting Officer, if he decides that the facts justify such action, may receive and act upon such claim asserted any time prior to final payment under this contract. Failure to agree to any adjustment shall be a dispute concerning a question of fact within the meaning of the clause of this contract entitled "Disputes". However, nothing in this clause shall excuse the Contractor from proceeding with the contract as changed.

(End of clause)

#### H.16 PERMITS AND LICENSES

Upon completion of the Period of Performance of Contract NAS8-33708 the Contractor shall obtain, and keep effective, all permits and licenses required for performance of this contract in accordance with the terms of this contract. Such permits and licenses shall include, but not be limited to, those required by the Federal, State, or Local Government authorities, or Subdivision thereof, or of any other duly constituted public authority. Further, the Contractor shall comply with all applicable laws, regulations and ordinances as in effect on the date of this contract.

Based on the contract restructuring of January, 1993, Document MMC-ET-MA89 "NASA/Martin Marietta Corporation Responsibilities for Environmental Laws Compliance" has been mutually agreed to in order to identify the regulations in effect and the Contractors' compliance with the regulations as of January, 1993. Any new regulations, change to existing regulations and or additional enforcement above current compliance levels of these regulations above the agreed to level in Document MMC-ET-MA89 will be the subject of a contractual modification and equitable adjustment of the contract.

(End of clause)

#### H.17 SHUTTLE PROCESSING CONTRACT

The contractor shall maintain all appropriate interfaces with the SPC and shall have the contractual right to reasonably observe the Tank processing at KSC to assure that the Tank is not incorrectly serviced or maintained and that it is not modified or serviced in an unauthorized manner.

(End of clause)

#### H.18 SAFETY AND HEALTH

(a) The Contractor shall establish and maintain a safety and health program to satisfy the requirements of the clause entitled "Safety and Health". The plans and changes thereto shall be submitted to the Contracting Officer for approval.

(b) The Contractor shall comply, as applicable, with the safety and health standards, specifications and issuances, effective as of the date of this contract, set forth below:

##### FEDERAL

- (1) 10 CFR, Energy, 1996 Edition.
- (2) 29 CFR, part 1904, Record keeping guidelines for Occupational Injuries and Illnesses, 1986 Edition.
- (3) 29 CFR, Part 1910, OSHA Standards for General Industry, 1996 Edition.
- (4) 29 CFR, Part 1926, OSHA Standards for the Construction Industry, 1996 Edition.
- (5) 33 CFR, Navigation and Navigable Waters, 1996 Edition.
- (6) 40 CFR, Protection of the Environment, 1987 Edition.
- (7) 49 CFR, Transportation, 1987 Edition.
- (8) NHB 7320.1, Facilities Engineering Handbook (From Superintendent of Documents, Government Printing Office, Washington, D. C. 20402).



## NATIONAL CONSENSUS STANDARDS

- (1) National Fire Code, Volumes I-XII, 1996 Edition.
- (2) American National Standards Institute (ANSI) Safety Standards, as Referenced in 29 CFR 1910 and 1926.
- (3) American Society of Mechanical Engineers, Boiler and Unified Pressure Vessel Code, as referenced in 29 CFR 1910 and 1926.
- (4) The International Civil Aviation Organization (ICAO) Technical Instruction/International Air Transport Association (IATA) Dangerous Goods Regulations of 1996.

(c) Accident, illness and incident reporting shall be in accordance with Marshall Management Instruction 1711.2E

(d) The Contractor shall also furnish any medical report of investigations involving industrial illness which may develop in employees as a result of their work under this contract.

(e) The provision of the "Safety and Health" Clause requiring a statement of acceptable threshold limits applicable to the contamination of property does not apply to effort under this contract.

(f) The Contractor shall establish and maintain a health information management system, a comprehensive medical tracing system. The Contractor will provide employee medical data for reports or historical information as required.

(End of clause)

H.19 MINIMUM INSURANCE COVERAGE (18-52.228-75)(OCT 1988)

The Contractor shall obtain and maintain insurance coverage as follows for the performance of this contract:

(a) Worker's compensation and employer's liability insurance as required by applicable Federal and state workers' compensation and occupational disease statutes. If occupational diseases are not compensable under those statutes, they shall be covered under the employer's liability section of the insurance policy, except when contract operations are so commingled with the Contractor's commercial operations that it would not be practical. The employer's liability coverage shall be at least \$100,000, except in states with exclusive or monopolistic funds that do not permit workers' compensation to be written by private carriers.

(b) Comprehensive general (bodily injury) liability insurance of at least \$500,000 per occurrence.

(c) Motor vehicle liability insurance written on the comprehensive form of policy which provides for bodily injury and property damage liability covering the operation of all motor vehicles used in connection with performing the contract. Policies covering motor vehicles operated in the United States shall provide coverage of at least \$200,000 per person and \$500,000 per occurrence for bodily injury liability and \$20,000 per occurrence for property damage. The amount of liability coverage on other policies shall be commensurate with any legal requirements of the locality and sufficient to meet normal and customary claims.

(d) Comprehensive general and motor vehicle liability policies shall contain a provision worded as follows:

"The insurance company waives any right of subrogation against the United States of America which may arise by reason of any payment under the policy."

(e) When aircraft are used in connection with performing the contract, aircraft public and passenger liability insurance of at least \$200,000 per person and \$500,000 per occurrence for bodily injury, other than passenger liability, and \$200,000 per occurrence for property damage. Coverage for passenger liability bodily injury shall be at least \$200,000 multiplied by the number of seats or passengers, whichever is greater.

(f) Vessel liability - minimum limit of \$200,000 per person and \$500,000 per occurrence for bodily injury.

(End of clause)

H.20 Reserved

H.21 SUBCONTRACTOR TERMINATION COSTS

The parties hereby agree that the cost and fee of this contract do not include costs for termination of the LTV and AVCO subcontracts currently in process. The Contractor will be entitled to an equitable adjustment to the contract value for such costs and fees incurred upon submission and negotiated of a proposal.

The provisions of this clause have been satisfied by the incorporation of the requirements of Project Change Proposal B81225 into the contract by Supplemental Agreement 294.

(End of clause)

H.22 Reserved

H.23 CREDIT FOR INVENTORY

The Contractor shall transfer usable residual inventory and associated allocable cost from Contracts NAS8-30300 and NAS8-33708 to this contract.

(End of clause)

H.24 APPROVAL OF CONTRACT

Pursuant to the clause entitled "Approval of Contract," this contract shall be subject to written approval of the Procurement Officer and shall not be binding until so approved. The signing of this contract by the Procurement Officer constitutes such approval.

(End of clause)

H.25 SUPPORT OF FIELD PERSONNEL

(a) The Contractor shall provide, at any Contractor-furnished place of performance, adequate office space and office equipment to accommodate resident Government Personnel deemed necessary by the Contracting Officer and/or Technical Manager, designated pursuant to Article G-2.

(b) The Government will provide adequate office space and equipment, warehouse, work areas, shop facilities, and supporting services to contractor personnel required to be located at an associated Contractor-operated facility for the proper performance of the work and services required to be furnished under this contract.

(c) The Contractor shall, insofar as possible, avoid incurring direct or indirect costs in duplicating work or support capacity available at or through any NASA installation involved in the performance of this contract or any major subcontract hereunder. Therefore, the Contractor agrees to utilize or cause to be utilized all available Government or Government-controlled working space,

equipment, supplies, materials, services, or other support (including communication services) at or available through any NASA installation where work under this contract is performed. Unless otherwise stipulated in the schedule of this contract, such items will be made available on a no-charge-for-use basis and the value thereof shall be a part of the consideration of this contract. The Contractor shall report any inadequacies or nonavailability of items contemplated hereby, together with a recommended plan for obtaining the requested item(s), to the Contracting Officer, who shall promptly determine the validity and extent of the requirement and the manner in which any approved requirement will be filled (as by purchase, rental, lease, or otherwise). The Contractor shall not purchase or otherwise furnish any requirement covered by this clause, or authorize others to do so, without written approval of the Contracting Officer of the terms of the proposed purchase or other arrangement. Items of a capital nature shall not be purchased under authority of this clause. The amount and character of support, together with other terms and conditions appropriate to the furnishing thereof, shall be determined and set forth in the schedule and the item(s) agreed to be furnished shall be accounted for hereunder by categories and installation(s). The effect of additions or changes in such support shall be fully documented and, if appropriate under the circumstance, equitable adjustment shall be made in the terms and conditions (including estimated cost, and award fee) of the contract, in accordance with the "Changes -- Cost Reimbursement - Alternate V (April 1984)" clause.

(End of clause)

#### H.26 SHARING OF COMMON SUPPORT EFFORT

(a) In the event that performance of common effort under Contracts NAS8-36747(F), NAS8-39243(F), or successors, or this contract is interrupted during the period of performance of this contract, or, in the event such contracts are terminated totally or in part, or if there is no follow-on contract to this contract on or before 12 months prior to start of production of ET-121, the Contracting Officer shall, upon written request of the Contractor, equitable adjust the estimated cost, fees, and any other provision of this contract which may be affected as a result of the loss of sharing of the sustaining effort. Failure to agree to any adjustments as defined herein shall be a dispute concerning a question of fact within the meaning of the clause of this contract entitled, "Disputes - Alternate I".

(End of clause)

## H.27 FOLLOW-ON PROCUREMENTS

(a) As a follow-on to the work called for under this contract and in order to preserve a full and free competitive environment, the Government may solicit offers to perform subsequent work from responsible firms as determined by the Contracting Officer. Nothing contained in this article or elsewhere within this contract shall restrict the right of the Contractor to compete with the remaining firms solicited for the subsequent work.

(b) The parties hereto mutually agree that should the Government elect to solicit such proposals from other firms, the Contractor shall support such action to the maximum extent possible without jeopardizing the competitive rights of the Contractor. To that end the following principles shall govern:

(1) Utilization of all proprietary information contained within specifications or documents prepared to meet the data requirements of this contract, shall be approved by the Government prior to such use. use of alternate processes, if directed by the Government, will be the basis for an equitable adjustment pursuant to the "Changes -- Cost Reimbursement -- Alternate V (April 1984)" clause of the contract. Data containing proprietary information approved for delivery by the Government and other design, procurement, material or process specifications shall be maintained by the Contractor, and upon request of the Contracting Officer, made available to the Government in accordance with clause 52.227-14 "Rights in Data - Limited Rights Notice." Nothing stated herein is intended to restrict the Government's right to challenge the proprietary of the notice.

(2) The Contractor shall develop and deliver a current "Recompetition Technical Data Package" in accordance with the requirements of Data Procurement Document DPD 660, Data Requirement (DR) No. SE18. DR SE-18 shall not contain any limited rights data. Contractor shall develop performance criteria in lieu of providing limited rights data in DR SE-18.

(3) Effective January 1, 1989, should the Government direct the Contractor to procure hardware beyond ET-121 prior to the issuance of any solicitation for contemplated subcontract effort, the Contractor shall evaluate the propriety and need for including options within such subcontracts for subsequent program increments. The results of each evaluation shall be made available to the Contracting Officer prior to release of the solicitation. Upon receipt of such information, the Contracting Officer shall either agree or disagree with the Contractor's conclusions and advise the Contractor accordingly. Options for subsequent program increments that may be exercised by either Lockheed Martin or the Government shall be included in each subcontract as deemed appropriate by the parties hereto under the provisions of this paragraph. (Changes in

estimated costs for performance of the prime contract resulting from the inclusion or exercise of an option on a subcontract shall be subject to an equitable adjustment by separate prime contractual action.)

(4) In the event that the Contractor is not awarded subsequent increments of the Space Shuttle External Tank Program and such increments are awarded to other companies, the Contractor shall prepare and submit to the Contracting Officer a transitional phase in plan for the successor Contractor. Such phase in plan shall identify and schedule the events necessary for an orderly transition of the successor Contractor with minimum interruption of the overall program production schedules of the predecessor Contractor. All effort associated with the preparation and implementation of such a transitional phase in plan shall be directed by the Contracting Officer in accordance with the "Changes -- Cost Reimbursement -- Alternate V (April 1984)" clause of this contract.

(End of clause)

#### H.28 PROPERTY, USE AND SALES TAXES

The contract price does not include any amount for:

- (1) Any property taxes assessed on the Contractor's possession of, interest in, or use of property, title to which is vested in the Government; nor
- (2) Any state sales or use taxes for direct purchases under this contract.

If either is imposed against Contractor as a result of performance of this contract, the Contracting Officer shall be notified promptly.

If the Contractor is required to render payment for any such taxes, said payment shall be made under protest and such event shall be the basis for an adjustment in price.

At the direction of the Contracting Office, the Contractor agrees to contest any such tax and to cooperate fully in any action instituted by the United States in Opposition of such tax.

The Contractor agrees to credit the United States for any refunds it may receive from such taxes determined to be erroneously paid.

(End of clause)

H.29 ALLOWABLE INDEPENDENT RESEARCH AND DEVELOPMENT/BID AND PROPOSAL COST

The allowable Independent Research and Development/Bid and Proposal Cost under this contract shall be limited to those cost incurred by the Lockheed Martin Michoud Space Systems and the Michoud Space Systems allocable share of the cost incurred by Lockheed Martin Corporation's Research Laboratory.

(End of clause)

H.30 PRODUCTION RELATED STATEMENT OF WORK

The Scope of Work for Production Effort is as defined in Attachment J-1, Paragraph 2.0, of this contract. The Production Effort Scope of Work included in the body of this contract was for administrative convenience and clarification and was inactive until the contract was modified for the fabrication and delivery of External Tanks ET-61 thru ET-121. The Scope of Work for Production Effort was authorized in this contract by S/A 007 effective January 1, 1989, which was definitized by S/A 028.

(End of clause)

H.31 EFFECTIVE DATE OF FAR CLAUSES

Clauses 52.215-26, "Integrity of Unit Prices" and 52.222-37 "Employment Reports on Special Disabled Veterans and Veterans of the Vietnam Era" which are subcontractor flow down clauses will not be effective until the date of execution of this contract and shall not be a requirement for any subcontracts or purchase orders issued prior to or change orders issued subsequent to the execution date of this contract.

(End of clause)

H.32 UNIT PRICING

This contract is based upon the Production of 60 External Tanks and is not subject to unit price regulations. Should this contract be modified to require unit prices per ET, the Contractor shall be entitled to equitable adjustment to the Contract under "Changes -- Cost Reimbursement -- Alternate V (April 1984)".

(End of clause)

H.33 SCIENTIFIC AND COMMERCIAL USE OF EXTERNAL TANKS

The National Aeronautics and Space Act of 1958 directs NASA to seek and encourage to the maximum extent possible, the fullest commercial use of space. Consistent with this direction, it is

anticipated that NASA will execute Memorandums of Agreements with commercial and non profit organizations for the utilization of the Space Shuttle External Tank in space. Subsequent to and to facilitate these agreements, the Contractor is authorized to establish separate contractual agreements with these organizations in the development of the External Tank for utilization in space. These External Tank Utilization Agreements will be entered into without increase in contract value to this contract. Any agreements entered into between NASA and other organizations, which subsequently require Lockheed Martin participation, will be the subject of separate contractual direction and will be the subject of a claim for contractual adjustment.

All modifications required of the ET will be submitted for approval and performed in accordance with established External Tank plans, procedures and configuration requirements established by this contract.

(End of clause)

#### H.34 VALUE ENGINEERING

The Contractor shall operate a voluntary Value Engineering Program in accordance with FAR Clause 52.248-1 - Value Engineering as contained in Section I of this contract.

The Contractor will submit identified Value Engineering Change Proposals to the Contracting Officer for acceptance or rejection. The proposal shall contain the completed form VE001 Rev. A as contained in Attachment J-13 of this contract. The Contracting Officer will issue a contract modification within 45 days of receipt of the VECP for each accepted VECP incorporating it into Attachment J-13 of this contract. The Contractor will receive payment of the VECP as specified in the definitizing Supplemental Agreement.

If the Contracting Officer rejects the VECP, the Contractor will be notified in writing of the reasons the VECP was rejected within 45 days of submittal.

(End of clause)

#### H.35 ENERGY COST REDUCTION

(a) The Contractor will operate an Energy Cost Reduction Program for the Michoud Assembly Facility in accordance with Attachment J-14 entitled Energy Cost Reduction Program attached hereto and made a part hereof



(b) Pursuant to provisions of Attachment J-14 for Incentive Energy Usage Reduction at MAF, the Contractor's goals for reduction of energy cost are set forth in Attachment J-14. Pursuant to the extent that the Contractor underruns such goals in the reduction of energy usage, the Contractor shall receive an additional Award Fee in accordance with the fee schedule provisions stated in Section C of Attachment J-14. Performance against the goals will be on an annual basis and measured in accordance with the formula established in Paragraph C of Attachment J-14. Within 60 days subsequent to each fiscal year of the Contractor will provide the data to the Contracting Officer to support the Contractor's performance against each annual goal. Contract Article B-2 will be changed to reflect the additional Award Fee earned, if any, and payable to the Contractor pursuant to Article B-2.

(c) Pursuant to the provisions of Attachment J-14 for Special Energy Reduction Projects, the KOR (Contractor's) Earned Share of the savings for these projects. Article B-2 will be amended to reflect the KOR Share earned by the Contractor on an annual basis. This share shall be in accordance with guidelines established in Section D of Attachment J-14.

(d) Pursuant to the provisions of Attachment J-14 for Contractor and third party Energy Cost Reduction projects Article B-2 will be amended to reflect the KOR Share earned by the Contractor on a semi-annual basis. This share shall be in accordance with guidelines established in Section E and F of Attachment J-14.

(e) Contractor Shares earned in accordance with Paragraphs C and D above are payable upon receipt of a fully executed contract modification and do not constitute profit or fee within the limitations as established by Paragraph D of Article B-4.

(End of clause)

**H.36 POST RETIREMENT GROUP INSURANCE, MEDICAL INSURANCE, AND PENSION PLAN EXCLUSION CLAUSE**

(a) The parties recognize and agree that Lockheed Martin Michoud Space Systems Fringe Rates negotiated November 14, 1988 for the years 1988 through 1996 are based on pay as you go treatment of the post retirement medical plan. It is further agreed that when Lockheed Martin Corporation is required to make a change to the actuarial accounting method to comply with the standards of the Financial Accounting Standards Board (FASB) for the post retirement medical plan and the Corporate Administrative Contracting Officer approves the change for forward pricing purposes, the fringe rates and the applicable Overheads and G&A for those years to which the Revised accounting method applies, will be revised to reflect the change. Upon such an event, the forward pricing rates applicable to this change will be resubmitted and new rates will be negotiated to reflect the effect of the change. It is also agreed that the Estimated Cost and Fee of this contract will be equitably adjusted to incorporate the effect of the change.

(b) It is recognized that the OMNIBUS Budget Reconciliation Act of 1987 is creating a potential cost impact to the Pension Cost. The estimated cost and fee in this contract are based on Forward Pricing Rates agreed to on November 9, 1988, for Overheads, Fringe Benefits and G&A and exclude consideration for any costs associated with the underfunded pension cost and group insurance increases proposed to the Corporate Administrative Contracting Officer on May 15, 1989 by Martin Marietta Corporation. Upon agreement between the CACO and the Contractor, the forward pricing rates including Overheads, Fringe Benefits and G&A will be resubmitted and new rates Negotiated to reflect the effect of this change, the adjusted rates shall be applied to this contract and the Estimated Cost and Fee will be equitably adjusted by contract modification reflecting such settlement. The provisions of Paragraph B. are applicable to Estimated Cost and Fee for all effort incorporated into the contract up to and including supplemental Agreement 028.

NOTE: The contract has been equitably adjusted for Paragraphs A and B above by the execution of Supplemental Agreement 257.

(End of clause)

#### H.37 TECHNOLOGY UTILIZATION/TRANSFER

Whereas, as stipulated in NASA FAR Supplement Part 18-27, Subpart 18-27.3, Paragraph 18-27.372 entitled "Policy", an objective of any NASA contract subject to Section 305 of the National Aeronautics and Space Act of 1958, as amended (42 U. S. C. 2457) is to obtain in regard to any invention, discovery, improvement and innovation, the prompt reporting thereof in order to provide their widest practicable and appropriate dissemination, early utilization, expeditious development, and continued availability for the benefit of the scientific, industrial and commercial interest and the general public. In addition, NASA policy is to promote utilization of inventions to ensure full and open completion and to promote commercialization and public availability of inventions.

Therefore, in implementation of the stated NASA policy and pursuant to the provisions of NASA FAR Supplement Clause 18-52.227-70 entitled, "New Technology", the Contractor shall provide Technology Utilization/transfer services in accordance with the provisions of Attachment J-15 of this contract for ET Technology.

(End of clause)

H.38 In the event the Contract Clause Price Adjustment contained in Purchase Agreement S120064 at Exhibit C(2) between Lockheed Martin Manned Space Systems and Reynolds Metal Company results in a reduction in price of the Purchase Agreement, the parties agree that the contract Part III Target Cost will be reduced accordingly and the Target Fee and Potential Award Fee will be reduced by an amount equivalent to those established in Contract Modification 355. This clause is deactivated by Contract Modification 447.

(End of clause)

(END OF SECTION)

H.39 NATIONAL CENTER FOR ADVANCED MANUFACTURING (NCAM)

The NASA, the University of New Orleans (UNO), and the State of Louisiana (acting through various legal entities) have joined together to develop, implement and operate a National Center for Advanced Manufacturing (NCAM). The Louisiana portion of the NCAM will be located on the NASA owned Michoud Assembly Facility. The NCAM is being pursued with industry to develop composite and advanced manufacturing technologies for industrial application and to encourage work force growth within Louisiana.

The objective of the NCAM program entails initial academic and vocational training and facilities, Intelligent Synthesis Environment (ISE) infrastructure implementation and utilization, and acquisition of NCAM equipment (Phase I). Phase II consists of program specific operations while enhancing Academia's active role of research, education, and training. Phase III is the commercial use of the facility by multiple parties while the Academic and R&D use continues and increases.

The Contractor is authorized to perform tasks as defined in Attachment J-20 herein subject to separate contractual action necessary to make NCAM operational at the Michoud Assembly Facility.

(End of Clause)

H.40 INFORMATION TECHNOLOGY (IT) SECURITY COMPLIANCE

NASA/MSFC and Lockheed Martin have reviewed the IT Security System in place at MAF as documented in Lockheed Martin Letter 01M0-0723. It was determined that this system complies with the requirements of the NASA FAR Supplement Clause 1852.204-76 dated July 2000 based on implementation of the effort scoped in this letter. Enclosures (1) and (2) to 01M0-0723, outlining the NPG 2810.1 summary and NPG 2810.1 details respectively, identifies the security level of compliance required by NASA/MSFC. Any determination that any element of this agreement is non-compliant may result in a contract change and equitable adjustment to the contract.

(End of Clause)

H.41 TRANSFER OF SPECIFIC PROPERTY TO NAS8-00016

a) Utilizing the DD1149 process, the Contractor shall transfer, for accountability purposes, the property identified in Lockheed Martin letter 02MO-0542 from Contract NAS8-36200, no later than the expiration of NAS8-36200, to NAS8-00016. Direct material costs and associated burdens will remain on the NAS8-36200 contract. These items are not applicable to residual inventory identified in Clause H.17 of the NAS8-00016 contract entitled "Credit for Inventory".

(End of Clause)

(END OF SECTION)